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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------|------------------|
| 09/932,510  | 08/17/2001  | Yasuhiro Fukuzaki    | IS11-002               | 6297             |
| 21567   | 7590        | 04/09/2004           | EXAMINER               |                  |
| WELLS ST. JOHN P.S.<br>601 W. FIRST AVENUE, SUITE 1300<br>SPOKANE, WA 99201 |             |                      | ROSENBERGER, RICHARD A |                  |
|   |             |                      | ART UNIT               | PAPER NUMBER     |
|   |             |                      | 2877                   |                  |

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/932,510

Applicant(s)

FUKUZAKI, YASUHIRO

Examiner

Richard A Rosenberg

Art Unit

2877

RJ

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

1. The following is a quotation of the first and second paragraphs of 35 U.S.C.

112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4-7 and 12-15 are rejected under 35 U.S.C. 112, second paragraph, as not being supported by the disclosure as filed and/or as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The instant specification includes four embodiments, see paragraphs [0004] and [0005] on pages 2 and 3. Independent claims 1 and 9 have been amended to limit the scope of those claims to include the language that the device and methods claimed have a "pointing device having a light emitting means", thus limiting the claims to the first two of these embodiments. However, claims 4-7 and 12-15 contain language which explicitly refer to the third and/or fourth embodiments. In claims 4 and 12, for example, the pointing device "intercepts the light form the light projecting frame" which creates a detected "incident shadow", which is not consistent with their respective independent claims, and intercepting the light and creating a shadow in not, and is not disclosed as, being a function of a light emitting

means or a pointing device having a light emitting means. Thus these claims are not supported by the specification and/or are unclear as to their intended scope.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 8-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable Tsikos (US 4,507,557) in view of Ogawa (US 6,100,538).

Tsikos shows a position detecting device of the type claimed that has a flat board (10) having a position detecting area. There are optical units (36, 38) in at least two positions adjacent to the position detecting area of the flat board; the signals therefrom are used to calculate the detected position by triangulation (column 5, line 51). Each optical unit comprises a one-dimensional light receiving element array having a plurality of light receiving elements (column 5, line 38-39). Figure 7 of the reference shows a circuit with a sequential output circuit outputting sequentially an analog value of an output of the one-dimensional light receiving array (the 8-BIT ADDRESS COUNTER 46 and D OUT of the dram imagers). As set forth in the patent, the output of the DRAM imager is the charge on a capacitor (column 5, lines 29-31 and 34-35; this will produce an analog signal since the

capacitor need not discharge totally depending upon the light level. There is a clock circuit (42) which supplies a timing signal to the sequential output circuit. Built into the 8-BIT LATCH is an output level comparing circuit which judged whether the output from the sequential output circuit is higher or lower than a predetermined voltage level (thus "deciding" whether to latch or not), and converting the analog signal into a digital timing signal; the address which is latched into the latch circuit is a direct indication of the time at which the output of the DRAM IMAGER triggered the latch, and the value latched is a digital value. The latch itself is a "variation timing measuring circuit" which obtains, from the ADDRESS COUNTER, a variation in timing of the output level comparing circuit. The pointed position is determined by obtaining the incident angle of the pointing device (see  $\theta_1$  and  $\theta_2$  in figure 1).

The device of Tsikos has light source means (LEDs 16 and 18) adjacent the optical unites (see figure 4) and retroreflective means (14) for retroreflecting light from the light source means. The retroreflecting means is on a frame (12; see column 4, line 28). The variation timing measuring circuit of figure 7 detects both a start timing and end timing of the light or shadow being detected (one in latch 84, the other in latch 86) to determine the center of the light or shadow. Figure 6 shows a filter circuit (see also column 7, lines 3-6) which as describes is a low-pass filter; column 7, lines 49-51, teaches that the low pass filtering is present in the embodiment of figure 7.

Tsikos shows using an opaque, shadow-producing object Ogawa shows that it is known in the art that a light-emitting stylus can be used in such an arrangement. It would have been obvious to us such an detection arrangement in the system such as shown by Tsikos because it is a known alternative arrangement for obtaining the position of the pointing device.

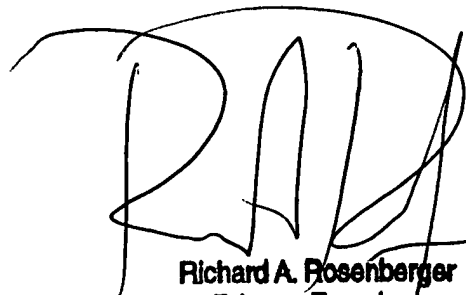
5. Asset for the above, claims 4-7 and 12-15 appear to be directed to undisclosed subject matter and their scope is at best unclear. As such it is unclear how they can be considered under the art. It is noted that, as set forth in the previous office action, the Tsikos et al reference teaches a shadow-detecting embodiment.

6. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (571) 272-2428.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger  
2 April 2004



Richard A. Rosenberger  
Primary Examiner